

**REMARKS**

The Office Action mailed September 19, 2006 has been carefully considered.

Reconsideration in view of the following remarks is respectfully requested.

**Canceled Claims**

Claim 10 has been canceled without prejudice or disclaimer. Its subject matter has been incorporated into Claim 9.

**Rejection(s) Under 35 U.S.C. § 102(e)**

Claims 1, 3, 5 and 7-10 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Byram et al. (U.S. pat. no. 5,493,178; hereinafter, “Byram”).

Claims 1, 2 and 9 now recite a first electrode for collecting electrons that impact it, the first electrode comprising a metallization layer formed on an inside portion of an insulating wall portion. Byram does not disclose this. Byram, in the passage to which the Office Action refers, states that “inner surface 20 can be metalized in places allowing the collector bodies to be brazed onto the ceramic body.”<sup>1</sup> In other words, “metalized” as used in Byram merely refers to the application of a layer of metal that serves to adhere the collector bodies to inner surface 20. This is consistent with the definition of brazing, in which a metal, in the molten state, is applied to two base objects to bond them together. In this case the base objects are the inner surface 20 and the collector bodies. Importantly, the collector bodies themselves are not the metalized material—they are merely adhered to the inner surface 20 using the metalized material. This is

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<sup>1</sup> Col. 5, ll. 2-4.

different from the claimed first electrode, which is the metallization layer itself as formed on the inside portion of the insulating wall.

It will be appreciated that, according to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102 only if each and every claim element is found, either expressly or inherently described, in a single prior art reference.<sup>2</sup> The aforementioned reasons clearly indicate the contrary, and withdrawal of the 35 U.S.C. § 102 rejection of Claims 1, 2 and 9, and Claims 3-9 and 11-15 dependent therefrom, based on Byram is respectfully urged.

**Rejection(s) Under 35 U.S.C. § 103(a)**

Claims 2, 4, 6 and 11-15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Byram in view of Delory et al. (U.S. pat. no. 4,358,707; hereinafter, "Delory").

Delory does not remedy the failure of Byram to disclose or suggest a first electrode for collecting electrons that impact it, the first electrode comprising a metallization layer formed on an inside portion of an insulating wall portion. For this reason at least, Claims 2, 4, 6 and 11-15 are patentable over the combination of these references, even if such a combination were proper, which Applicants do not concede.

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<sup>2</sup> Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

**Conclusion**


In view of the preceding discussion, Applicants respectfully urge that the claims of the present application define patentable subject matter and should be passed to allowance.

If the Examiner believes that a telephone call would help advance prosecution of the present invention, the Examiner is kindly invited to call the undersigned attorney at the number below.

Please charge any additional required fees, including those necessary to obtain extensions of time to render timely the filing of the instant Amendment and/or Reply to Office Action, or credit any overpayment not otherwise credited, to our deposit account no. 50-1698.

Respectfully submitted,  
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